ZENER DIODES

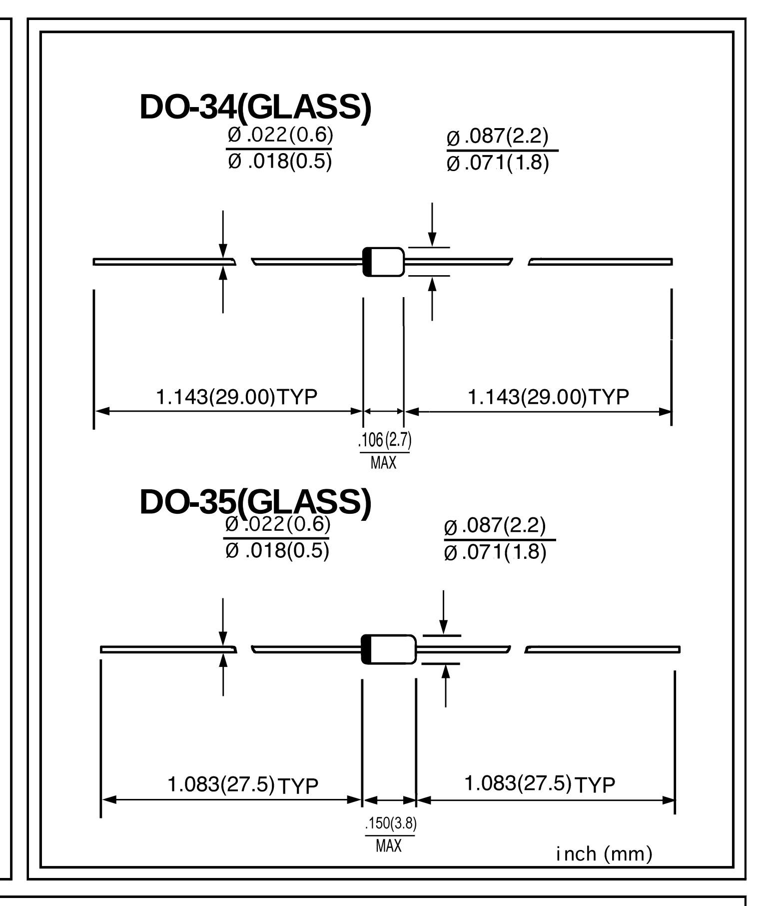
POWER DISSIPATION: 500 mW

FEATURES

- ◇ Silicon planar power zener diodes
- ◇ The zener voltages are graded according to the international E 24 standard. Standard zener voltage tolerance is ±5%. Replace suffix "C" with "B" for ±2%, other voltage tolerance and other zener voltage are available upon request.

MECHANICAL DATA

- ◇ Case:DO-35, Glass Case
- ◇ Terminals: Solderable per MIL-STD-202, method 208
- ◇ Polarity: Cathode band
- ◇ Marking: Type number
- ◇ Approx. Weight: 0.013 grams.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

	SYMBOL	VALUE	UNIT
Zener current (see Table "Characteristics")			
Power dissipation @ T_{amb}=25℃	P_{tot}	500 (1)	mW
Junction temperature	T_J	175	℃
Storage temperature range	T_s	-55---+175	℃

	SYMBOL	MIN	TYP	MAX	UNIT
Thermal resistance junction to ambient	$R_{\theta JA}$	—	—	300 (1)	℃/W
Forward voltage at I_F=100mA	V_F	—	—	1.0	V

NOTES: (1) Valid provided that leads at a distance of 10 mm from case are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS (TA=25℃)

Type	Nominal zener voltage @Iz=5mA	Maximum dynamic impedance		Typical temperature cofficient	Maximum reverse leakage current		Maximum regulator current
	V_Z	Z_{ZT} @I_{ZT}	Z_{ZT} @I_{ZK}	α_{VZ}	I_R	Test voltage V_R	I_{ZM}
	V	Ω	Ω	%/℃	μA	V	mA
BZX55-C2V4	2.28-2.55	85	600	-0.070	50	1.0	150
BZX55-C2V7	2.5-2.9	85	600	-0.070	10	1.0	135
BZX55-C3V0	2.8-3.2	85	600	-0.070	4	1.0	125
BZX55-C3V3	3.1-3.5	85	600	-0.065	2	1.0	115
BZX55-C3V6	3.4-3.8	85	600	-0.060	2	1.0	105
BZX55-C3V9	3.7-4.1	85	600	-0.050	2	1.0	95
BZX55-C4V3	4.0-4.6	75	600	-0.025	1	1.0	90
BZX55-C4V7	4.4-5.0	60	600	-0.010	0.5	1.0	85
BZX55-C5V1	4.8-5.4	35	550	+0.015	0.1	1.0	80
BZX55-C5V6	5.2-6.0	25	450	+0.025	0.1	1.0	70
BZX55-C6V2	5.8-6.6	10	200	+0.035	0.1	2.0	64
BZX55-C6V8	6.4-7.2	8	150	+0.045	0.1	3.0	58
BZX55-C7V5	7.0-7.9	7	50	+0.050	0.1	5.0	53
BZX55-C8V2	7.7-8.7	7	50	+0.050	0.1	6.0	47
BZX55-C9V1	8.5-9.6	10	50	+0.060	0.1	7.0	43
BZX55-C10	9.4-10.6	15	70	+0.070	0.1	7.5	40
BZX55-C11	10.4-11.6	20	70	+0.070	0.1	8.5	36
BZX55-C12	11.4-12.7	20	90	+0.070	0.1	9.0	32
BZX55-C13	12.4-14.1	26	110	+0.070	0.1	10	29
BZX55-C15	13.8-15.6	30	110	+0.070	0.1	11	27
BZX55-C16	15.3-17.1	40	170	+0.070	0.1	12	24
BZX55-C18	16.8-19.1	50	170	+0.070	0.1	14	21
BZX55-C20	18.8-21.2	55	220	+0.070	0.1	15	20
BZX55-C22	20.8-23.3	55	220	+0.070	0.1	17	18
BZX55-C24	22.8-25.6	80	220	+0.080	0.1	18	16
BZX55-C27	25.1-28.9	80	220	+0.080	0.1	20	14
BZX55-C30	28-32	80	220	+0.080	0.1	22	13
BZX55-C33	31-35	80	220	+0.080	0.1	24	12
BZX55-C36	34-38	80	220	+0.080	0.1	27	11

FIG.1 – BREAKDAWN CHARACTERISTICS

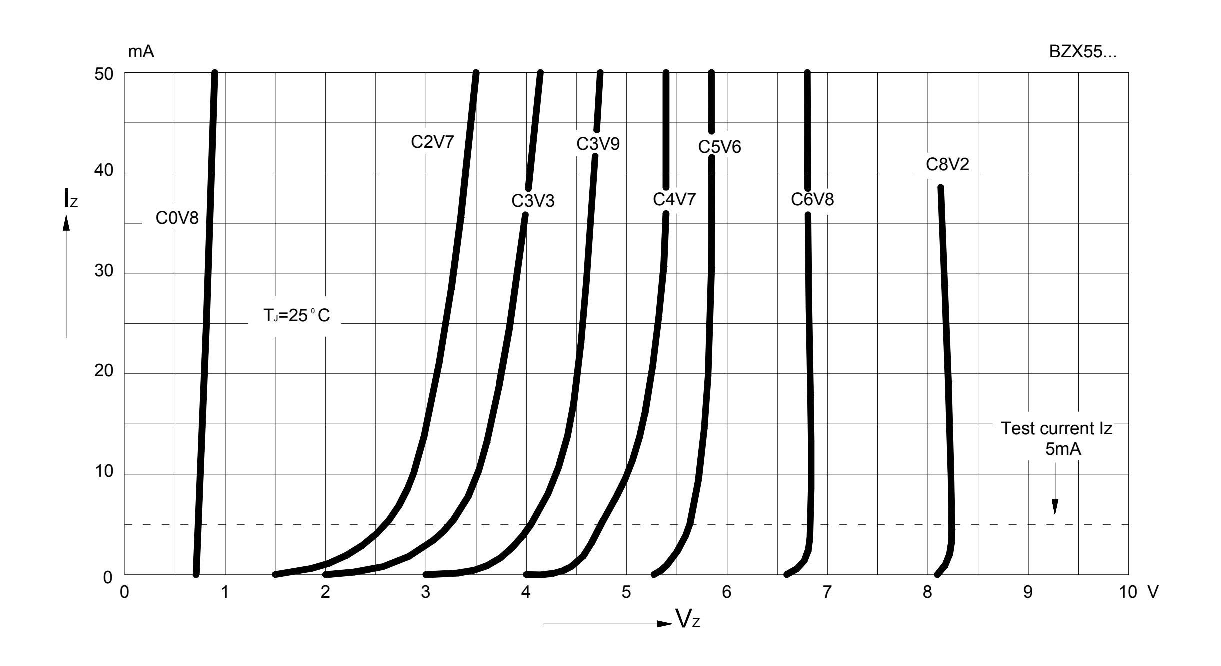


FIG.2 – BREAKDOWN CHARACTERISTICS

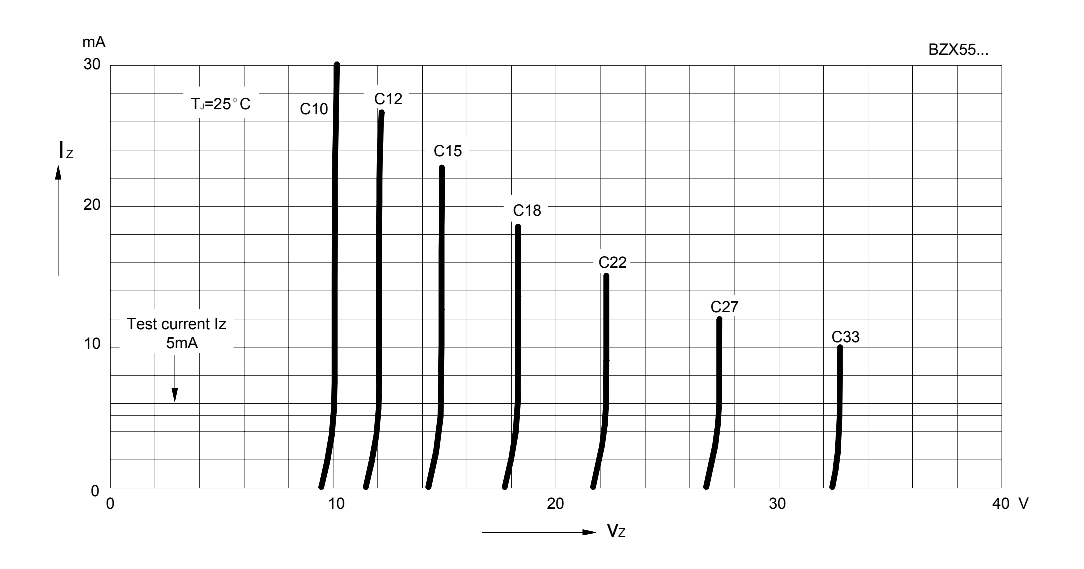


FIG.3 -- ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE

